



The City of Fitchburg Public Works Department/Utility Division
2013 Annual Water Quality Report
North System
PWSID #11302313

THE MARK OF EXCELLENT SERVICE

The City of Fitchburg, Public Works Department/Utility Division, is pleased to present to you the Consumer Confidence Report for 2013. We are committed to providing our customers with safe and reliable drinking water. This commitment demands diligence, foresight, investment, and long-range planning.

Monitoring and treatment are key methods by which the City of Fitchburg protects the public water supply. Each year the Utility Division works hard at ensuring your water supply meets the highest of standards established by the State of Wisconsin and the U.S. Environmental Protection Agency (EPA). Drinking water in Fitchburg continues to meet or exceed all of the Environmental Protection Agency's standards. The water quality data contained in this report is based on monitoring results from the 2013 calendar year.



FITCHBURG WATER

How often is Fitchburg's water tested?

Certified staff at the City of Fitchburg and certified laboratories conduct the following tests:

Daily: Fluoride

Weekly: Chlorine and Phosphates (two times)

Monthly: Bacteriological (15 samples at different locations throughout the City)

Additional testing is completed Quarterly, Annually, and Tri-Annually based upon the State of Wisconsin and the U.S. Environmental Protection Agency (EPA) requirements.

Fitchburg Utility relies on groundwater pumped from four deep wells producing an average of 2.1 million gallons of water per day. They range in depth from 965-1,033 feet. We also have three elevated storage tanks and one ground reservoir with a combined storage capacity of 2.25 million gallons.

Our wells pump water from a locally recharged deep aquifer, allowing us to bypass the upper aquifer water

which is more susceptible to surface contamination. Though certain aquifers may be less susceptible than others, all aquifers are susceptible to some degree of contamination. For this reason, it is imperative that wellhead protection guidelines are practiced in an effort to maintain the quality of water produced by these wells.

Your water is treated with liquid chlorine at each individual well site to reduce or remove harmful bacteriological contaminants that may come from the source water. We maintain a disinfection residual of 0.6 mg/l (milligrams per liter or parts per million).

To help prevent tooth decay we add liquid fluoride. Our goal is to maintain a residual of 0.7 mg/l of fluoride.

Safety, efficiency, and planning are the hallmarks for excellent service found in City of Fitchburg Public Works Department. Check us out at www.fitchburgwi.gov

FOR MORE INFORMATION

Please contact Tim Shackleton, Fitchburg Utility Superintendent, via e-mail at tim.shackleton@fitchburgwi.gov or by phone at 608-729-1730 for more information. You are encouraged to attend the City's Board of Public Works meetings at Fitchburg City Hall, 5520 Lacy Road. Please see the Public Meetings Calendar at www.city.fitchburgwi.gov for meeting dates and times.

MESSAGE FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's safe drinking water hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's safe drinking water hotline (800-426-4791).

The sources of drinking water both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminations that may be present in source water include: *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming. *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems. *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottle water, which shall provide the same protection for public health.

CONTAMINANT REPORTING

The Environmental Protection Agency (EPA) and State of Wisconsin allow us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

The Consumer Confidence Report (CCR) may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If the testing is done less frequently, the results shown on the CCR are from the past five years.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a public water system shall follow.

90TH Percentile: 90% of samples are equal to or less than the number on the chart.

Units in the Table:

nd = not detected at testing limits

ppb = parts per billion

ppm = parts per million

pCi/L = picocuries per liter – a measure of radioactivity

millirems/year = a measure of radiation absorbed by the body.

ug/l = micrograms per liter

mg/l = milligrams per liter

n/a = Not Applicable

WATER QUALITY TABLE


| Contaminant | Unit | MCL | MCLG | Level Detected | Range | Violation (Yes/No) | **Sampling Date | Potential Source of Contamination |
|--------------------------------------|-------|--------|------|----------------|---|--------------------|-----------------|--|
| Disinfection Byproducts | | | | | | | | |
| Haloacetic Acids (HAA5) | ppb | 60 | 60 | 0 | 0-0 | No | | By-product of drinking water chlorination |
| Total Trihalomethanes (TTHM) | ppb | 80 | 0 | 6.5 | 2.6-6.5 | No | | By-product of drinking water chlorination |
| Inorganic Contaminants | | | | | | | | |
| Barium | ppm | 2 | 2 | 0.018 | 0.011-0.018 | No | 8/15/2011 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Copper | ppm | AL=1.3 | 1.3 | 0.3200 | 0 of 30 results were above the action level | No | 8/10/2011 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Chromium | ppb | 100 | 100 | 0.13 | 0.13 | No | | Discharge from steel and pulp mills; Erosion of natural deposits |
| Fluoride | ppm | 4 | 4 | 0.1 | 0.1-0.1 | No | 8/15/2011 | Erosion of natural deposits; Water additives which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Lead | ppb | AL=15 | 0 | 3.40 | 0 of 30 results were above the action level | No | 8/10/2011 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Mercury | ppb | 2 | 2 | 0.1 | 0.0-0.1 | No | 8/15/2011 | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Nickel | ppb | 100 | | 2.9000 | 1.4000-2.9000 | No | 8/15/2011 | Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products |
| Nitrate (N03-N) | ppm | 10 | 10 | 0.06 | 0.00-0.06 | No | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits |
| Selenium | ppb | 50 | 50 | 3 | 2-3 | No | 8/15/2011 | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| Sodium | ppm | n/a | n/a | 3.00 | 2.30-3.00 | No | 8/15/2011 | n/a |
| Radioactive Contaminants | | | | | | | | |
| Combined Uranium | ug/l | 30 | 0 | 0.7 | 0.3-0.7 | No | 8/15/2011 | Erosion of natural deposits |
| Gross Alpha, Excl. R&U | pCi/l | 15 | 0 | 2.4 | 1.9-2.4 | No | 8/15/2011 | Erosion of natural deposits |
| Gross Alpha, Incl. R&U | n/a | n/a | n/a | 2.9 | 2.1-2.9 | No | 8/15/2011 | Erosion of natural deposits |
| Gross BETA Particle Activity | pCi/l | n/a | n/a | 3.6 | 3.6 | No | 2/3/2010 | Decay of natural and man-made deposits. MCL units are in milirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l |
| Radium, (226+228) | pCi/l | 5 | 0 | 3.4 | 0.9-3.4 | No | 8/15/2011 | Erosion of natural deposits |
| Unregulated Contaminants | | | | | | | | |
| Chlorate | ppb | n/a | n/a | 48 | 48 | No | | n/a |
| Cobalt | ppb | n/a | n/a | nd | nd | No | | n/a |
| Hexavalent Chromium | ppb | n/a | n/a | 0.11 | 0.11 | No | | n/a |
| Molybdenum | ppb | n/a | n/a | nd | nd | No | | n/a |
| Strontium | ppb | n/a | n/a | 65 | 65 | No | | n/a |
| Sulfate | ppm | n/a | n/a | 17.00 | 14.00-17.00 | No | 8/15/2011 | n/a |
| Vanadium | ppb | n/a | n/a | nd | nd | No | | n/a |
| Volatile Organic Contaminants | | | | | | | | |
| Trichloroethylene | ppb | 5 | 0 | 0.7 | 0.0-0.7 | No | | Discharge from metal degreasing sites and other factories |

* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the NUMBER of sites or the actions taken to reduce these levels, please contact your water supply operator.

** Sampling Date listed only if prior to 2013.

WATER CONSERVATION

The City of Fitchburg is offering toilet rebates of up to \$100 for residential properties who replace their high water using toilets with EPA WaterSense approved high efficiency toilets. Please visit our website at www.city.fitchburg.wi.us for eligibility requirements and to obtain an application.

|  5 SIMPLE WAYS TO SAVE WATER | |
|---|---|
| Be smart when irrigating your lawn or landscape | <ul style="list-style-type: none">• Water in early morning.• Water plants according to their water needs.• Set sprinklers to water lawns and gardens only – no sidewalks or driveways.• Use soaker hoses or trickle irrigation systems for trees/shrubs. |
| Use appliances wisely | <ul style="list-style-type: none">• Wash only full loads; set small loads to appropriate level.• Scrape rather than rinse dishes before loading the dishwasher• Replace old clothes washer with ENERGY STAR labeled one. |
| Don't flush money down the toilet/drain | <ul style="list-style-type: none">• Check your toilet for leaks by adding food coloring to the tank and seeing if color appears in the bowl within 15 minutes.• When replacing your toilet, look for WaterSense labeled models. |
| Conserve around the house | <ul style="list-style-type: none">• Keep drinking water in the refrigerator; don't run faucet till cool.• Don't leave the tap running while brushing teeth or shaving. |
| Stop leaks | <ul style="list-style-type: none">• Read water meter before and after a two-hour period when no water is being used; it should be zero. If it is not zero, locate the leak and repair it. |